NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN F. KENNEDY SPACE CENTER
KENNEDY SPACE CENTER, FLORIDA 32899

REPLY TO ATTN OF: AA-MFP-1 (74-6-10)

JUN 20 1974

TO: Distribution

FROM: AA/Manager, Sciences, Applications, Skylab and ASTP Programs

SUBJECT: Apollo-Soyuz Test Project (ASTP) Directive No. 1B, dated May 30, 1974, Subject: ASTP Directives and Documents, Control Milestones, Flight Hardware and Major Operational and Test Facility Assignments

The subject ASTP Project Directive (No. 1B) has been received by this office and is being sent to you for your information or use, as appropriate. Changes incorporated in this issue are described in my briefing note to Dr. Debus, a copy of which is attached.

William H. Rock
William H. Rock

Attachments:
1. ASTP Project Directive No. 1B
2. Briefing Note to Dr. Debus

Distribution:
Skylab - ASTP Distribution M

JUN 18 1974

Dr. Debus:

SUBJECT: Apollo-Soyuz Test Project (ASTP) Directive No. 1B

This Directive, entitled: "ASTP Directives and Documents, Control Milestones, Flight Hardware and Major Operational and Test Facility Assignments," dated May 30, 1974, establishes baselines in these areas for detailed program planning and sets forth the responsibilities of the Center Program Managers. This Directive supersedes ASTP Program Directive No. 1A, dated November 29, 1973.

Changes incorporated into this document are:

a. The requirement for Center Program Managers to provide a monthly assessment of the control milestones by the 25th day of each month.

b. The addition of a requirement for a backup ASTP mission capability.

c. The addition of several control milestones and changes of dates in others in Enclosure B.

d. Changes in flight hardware designations in Enclosure C.

A draft of this Directive incorporating all of the changes was circulated among the KSC directorates and offices in April. No adverse comments were received. No adverse impact on KSC was anticipated from the inclusion of the changes.

The Program Mission and Schedules Baseline Directive will be revised to include the changes in control milestones.

ASTP Directive No. 1B will be given the usual distribution to first and second level directorates and subordinate elements having a need for copies.

William H. Rock

William H. Rock

Enclosures a/s

OFFICE OF MANNED SPACE FLIGHT PROGRAM DIRECTIVE	M-D MA 1400.151B (Project)	DATE MAY 30 1974

APOLLO/SOYUZ TEST PROJECT (ASTP) DIRECTIVE NO. 1B

TO: DISTRIBUTION

FROM: Chester M Lee
PROGRAM DIRECTOR, ASTP

SUBJECT: ASTP Directives and Documents, Control Milestones, Flight Hardware and Major Operational and Test Facility Assignments

OFFICE OF PRIME RESPONSIBILITY (OPR): ASTP Program Budget and Control (MAP)

REFERENCES:
(a) Letter from M/Associate Administrator for Manned Space Flight (with concurrence by AD) to Directors, KSC, MSFC, JSC, subj: "Apollo/Soyuz Test Project," June 17, 1972

(b) Apollo/Soyuz Test Project Approval Document (PAD), effective issue

(c) NMI 8020.20, November 28, 1972, ASTP Management

I. PURPOSE

This directive defines the ASTP directives and documents, control milestones, flight hardware, development and test hardware, and major operational and test facility assignments to be used as a baseline for detailed project planning. Responsibilities of Center Program Managers are also established. The requirements of this directive shall govern if there is a variance with any other ASTP directive.

II. ASTP DIRECTIVES AND DOCUMENTS

Reference (a) establishes the ASTP management system to be used and defines management responsibilities. References (b) and (c) further define management responsibilities. Enclosure A lists those Program Directives and documents which are applicable to the ASTP. In general, the Apollo Program Directives and documents are directly usable on ASTP when the references to the lunar mission are deleted.

III. CONTROL MILESTONES

Enclosure B designates certain major or key program events as control milestones. Control milestones are those milestones which represent US/USSR or intercenter programming events, significant development tests, tests which constrain flight missions, deliveries of stages, modules, and ground support equipment and software to KSC. Changes to these milestones require ASTP Program Director approval. Center Program Managers are required to provide a monthly assessment of the control milestones, addressing the present status of activities leading to the successful completion of each milestone, together with an assessment of successfully completing each milestone on schedule. Monthly reports are to be submitted by the 25th of each month.

IV. FLIGHT HARDWARE ASSIGNMENTS

The major flight hardware assignments for ASTP are presented in reference (b). Enclosure C lists detailed flight hardware assignments. Changes to this list must be approved by the Program Director.

V. BACKUP ASTP MISSION CAPABILITY

A part of the basic Apollo/Soyuz Test Project is to provide a backup ASTP mission capability which will be implemented if the primary mission objective of rendezvous and docking is not achieved. Detailed hardware assignments to support this backup mission capability are contained in Enclosure C. Changes to this list must be approved by the Program Director. Funds over and above those presently approved in POP 74-1 to provide for the capability to conduct two ASTP missions will not be allocated prior to the launch of the primary mission without explicit approval of the Program Director if such additional funds will result in an increase in expenditures in Fiscal Year 1974 or Fiscal Year 1975.

VI. MAJOR OPERATIONAL AND TEST FACILITY ASSIGNMENTS

Enclosure D lists the major operational and test facilities required by ASTP. Changes to this list must be approved by the Program Director.

VII. RESPONSIBILITIES

Center Program Managers are responsible for the implementation of the requirements of this directive and for requesting changes to the control milestones and hardware assignments under their management responsibility. Center Program Managers will notify the Program Director immediately whenever a situation exists or is anticipated that will impact or potentially impact controlled schedules.

ENCLOSURES

A - List of ASTP Program Directives and Documents

B - ASTP Control Milestones

C - Detailed Flight Hardware Assignments

D - KSC, JSC, MSFC - Major Operational and Test Facility Assignments

ASTP PROGRAM DIRECTIVES AND DOCUMENTS

MAY 30 1974

The following directives and documents are applicable to the Apollo/Soyuz Test Project. Apollo Program Directives (APD Numbers) listed are applicable in their present form.

DIRECTIVE NO.	TITLE	DATE
ASTP-1B	ASTP Directives & Documents, Control Milestones, Flight Hardware & Major Operational & Test Facility Assignments.	
ASTP-2A	ASTP Coordination with the Office of International Affairs	October 30, 1973
ASTP-3	Technical Investigations	November 26, 1973
ASTP-4	ASTP Television	December 20, 1973
ASTP-6	Key Inspection, Review & Certification Checkpoints & Their Documentation	June 25, 1973
ASTP-8	Apollo Flight Readiness Review	June 25, 1973
APD-19C	Apollo Flight Evaluation Reporting Requirements	Mar. 4, 1970
APD-21A	Monthly Weight & Performance Data Submittal Requirements	Jul. 21, 1971
APD-23	Saturn/Apollo Tank & Fluid Materials Testing Requirements	Dec. 6. 1967
APD-26B	Preparation of Test & Checkout Plans & Procedures at KSC	Dec. 6, 1967
	Addendum #1 to PAD 26B	Dec. 8, 1970
APD-31A	Apollo Systems Safety Program Requirements	Nov. 5, 1970
APD-32D	Quality & Reliability Assurance Auditing	Oct. 7, 1970
APD-33A	Center Responsibilities in the Apollo Program	Aug. 5, 1968
	Addendum #1 to 33A	Oct. 5, 1972

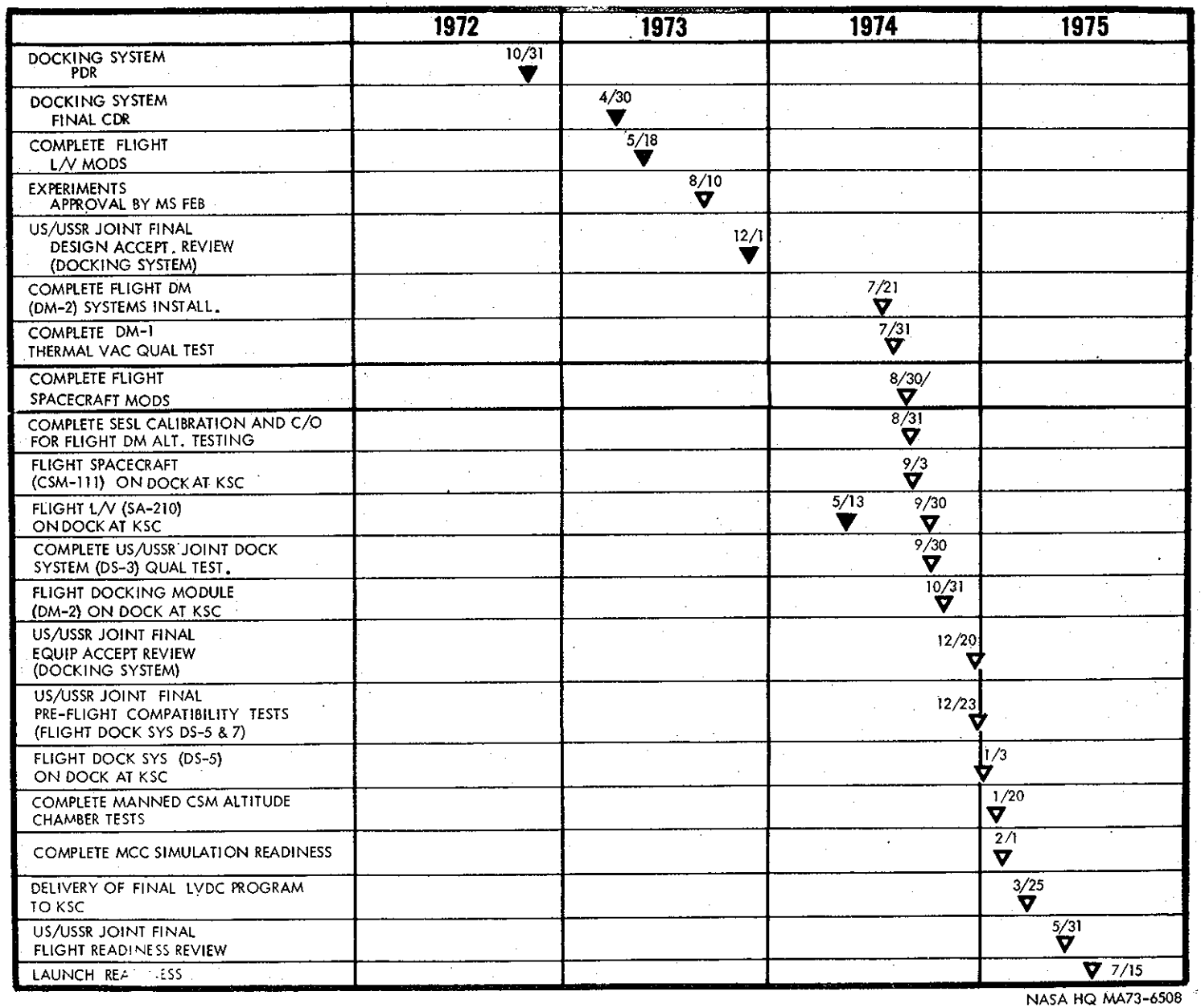
DIRECTIVE NO.	TITLE	DATE
APD-34C	Apollo Program CCB Controls & Requirements	Nov. 6, 1969
APD-36	Apollo Program Equipment Cannibalization Control	Jan. 8, 1968
APD-39	General Standard for Preservation Packaging, Packing, Marking, Handling, & Shipping of Apollo Space Vehicle Components, Parts & Associated Equipment	Apr. 22, 1968
APD-40B	Launch Critical Spares Management	Jun. 25, 1971
APD-43A	Apollo Mission Implementation Plan	Dec. 2, 1969
APD-44A	Apollo Program Nonconformance Reporting & Corrective Action	May 27, 1969
APD-46B	Apollo Mission Rules	Oct. 15, 1970
APD-47	Apollo Inter-Center Interface Management	Dec. 16, 1968
APD-48	Apollo Postflight Crew Debriefings	Jan. 28, 1969
APD-56	Technical Support for Resolving Significant Technical Problems from Space Vehicle Rollout through Mission Completion	Nov. 12, 1970
DOCUMENT NO.		
NHB 8080.1A	Apollo Test Requirements	Jun. 1971
SE 005-001	Apollo/Soyuz Test Project Specification	Sept. 25, 1973
NHB 8040.2	Apollo Configuration Management Manual	Jan. 1970

DOCUMENT NO.		
NHB 5300.2	Apollo Metrology Requirements Manual	Dec. 1965
	Mission Implementation Plan	(Prepared for each mission)
	Program Support Requirements Document	(Prepared for each mission)

NASA R&QA DOCUMENTS

DOCUMENT NO.		
NHB 5300.1A	Apollo Reliability & Quality Assurance Program Plan	Jul. 1966
NHB 5300.4 (1A)	Reliability Program Provisions for Aeronautical & Space System Contractors	Apr. 1969
NHB 5300.4 (1C)	Inspection System Provisions for Aeronautical & Space System Materials, Parts, Components & Services	Jul. 1971
NHB 5300.4 (2B)	Quality Assurance Provisions for Government Agencies	Nov. 1971
NHB 5300.4 (3A)	Requirements for Soldered Electrical Connections	May 1968
NHB 5300.4 (3C)	Line Certification Requirements for Microcircuits	May 1971
NHB 5300.4 (3D)	Test Methods & Procedures for Microcircuit Line Certification	May 1971
NHB 5300.4 (3E)	Radiograph Inspection for Microcircuits	Oct. 1971
NHB 5300.4 (3F)	Qualified Products Lists Requirements for Microcircuits	Jun. 1972
NHB 5300.7	Management of Government Quality Assurance Functions for Supplier Operations	Apr. 1966

ASTP CONTROL MILESTONES



NASA HQ MA73-6508
REV 5-14-74

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ASTP DIRECTIVE NO. 1B
ENCLOSURE B
PAGE 1 OF 1

DETAILED FLIGHT HARDWARE ASSIGNMENTS

General

This enclosure includes the flight hardware assignment summary for the ASTP mission.

The prelaunch checkout and launch schedule for ASTP are based on the project policy that flight hardware will be delivered to KSC on the date specified in Enclosure B of this directive and will arrive with all manufacturing work and predelivery testing completed, unless specifically noted otherwise. The requirements of APD 34C will apply to all hardware which does not meet this requirement.

CSM's BLK II

CSM 111

CSM 119 (a) (To be converted from Skylab to ASTP Configuration at KSC)

ADAPTERS

SLA TRUSS #1

SLA TRUSS #2 (a)

DOCKING MODULES

DMOD #2

DMOD #1 (Refurbished after use as thermal vacuum test module)(b)

DOCKING SYSTEMS

DS-5 &

DS-7 (b)

SLA's

SLA #18 (To be converted from Skylab to ASTP Configuration at KSC)

SLA #22 (a)(To be converted from Skylab to ASTP Configuration at KSC)

(a) Backup

G&N

G&N #215

G&N #213 (a)

SUITS

Maximum use of previously qualified hardware

Flight -9 (New Procurement)

Training-6 (Refurbished)

LAUNCH VEHICLES

S-IB (210, 209 (a))

S-IVB (210, 209 (a))

S-IU (210, 209 (a))

(a) Backup

MAJOR OPERATIONAL AND TEST FACILITY ASSIGNMENTS

The following list of major facilities will be required to be in an operational status in the time periods indicated.

KSC

O&C BUILDING	NO. REQD	PERIOD
Altitude Chamber	2	
CSM		Jul 74 - Jul 75
Docking Module*		Oct 74 - Jul 75
High Bay	1	Sep 74 - Jul 75
ACE Stations	2	Sep 74 - Jul 75
LC-39		
Low Bay, S-IVB Cell	1	Oct 74 - Jul 75
High Bay 1	1	Jan 74 - Jul 75
VAB Facilities	1	Jan 74 - Jul 75
Firing Room		
Primary - FR #3	1	Feb 74 - Jul 75
Backup - FR #2	1	Jan 74 - Jul 75
Training Room #4 (DEE-6 Computer Area)	1	Feb 74 - Jul 75
Crawlers	2	Feb 75 - Jul 75
LUT-1	1	Nov 74 - Jul 75
Mobile Service Structure	1	Feb 75 - Jul 75
PAD B	1	Feb 75 - Jul 75

*The former LM altitude chamber will be used as a test stand for some DM checkout. No altitude run on the DM will be made at KSC.

JSC

	NO. REQD.	PERIOD
Thermal Vac Facility	1	Mar 74 - Oct 74
Eight Foot Vac Chamber (ECLSS Breadboard)	1	Jul 73 - Jul 75
Dynamic Docking Test Facility	1	Aug 73 - Oct 74
Mission Simulators		
Command Module	1	Mar 74 - Jul 75
Docking Module	1	May 74 - Jul 75
ACE Station (Bldg 32, Space Environmental Simulation Lab)	1	Feb 74 - Oct 74
Mission Operations Control Room	1	Feb 75 - Jul 75
Telemetry & Communications Systems Div. Facilities	1	Jan 74 - Sept 75

MSFC

Saturn IB Systems Development Facility (SDF)	1	May 74 - Jul 75
Huntsville Operations Support Center (HOSC)	1	Feb 75 - Jul 75